

CLAIMS

What is claimed is:

1 1. A method of method for manufacturing finger rings, bracelets, earrings, and
2 other annular body jewelry from sintered, or cemented, composite materials comprising
3 at least one metal carbide and a metallic binder, comprises the steps of:
4 placing an annular blank of sintered material in a spinning fixture; and
5 abrading the annular blank against at least one curved abrasive surface so that
6 the annular blank acquires a curved surface about its circumference.

1 2. The method of claim 1, which further comprises the steps of:
2 providing an annular blank having at least one annular groove therein on an
3 outer surface thereof;
4 forcing a piece of precious metal wire into each groove, beginning at one end
5 thereof and continuing to the opposite end thereof so that both ends of the precious
6 metal wire adjoin one another; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 3. The method of claim 2, which further comprises the step of joining together the
2 ends of the precious metal wire.

1 4. The method of claim 2, which further comprises the step of burnishing the
2 precious metal in the groove.

1 5. The method of claim 2, wherein the precious metal wire is hammered into the
2 groove.

1 6. The method of claim 2, wherein the precious metal wire is rolled into the groove.

1 7. The method of claim 1, which further comprises the steps of:
2 providing an annular blank having at least one annular groove therein on an
3 outer surface thereof;
4 forming an endless hoop of precious metal wire for each annular groove;
5 pressing an endless hoop into each groove using a radial crimping/swaging
6 machine; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 8. The method of claim 7, which further comprises the steps of:
2 undercutting the walls of the groove with an abrasive tool prior to pressing an
3 endless hoop into an annular groove.

1 9. The method of claim 1, wherein the annular blank is subjected to a thin film
2 deposition process selected from the group consisting of physical vapor deposition,
3 chemical vapor deposition and plasma-assisted chemical vapor deposition, in which a
4 coating selected from the group consisting of titanium nitride and diamond like carbon is
5 applied thereto.

1 10. A method for manufacturing finger rings, bracelets, earrings, and other annular
2 body jewelry from sintered, or cemented, composite materials comprising at least one
3 metal carbide and a metallic binder, comprises the steps of:
4 providing an annular blank having at least one annular groove therein on an
5 outer surface thereof;
6 forcing a piece of precious metal wire into each annular groove; and
7 removing excess precious metal to the level of the outer surface of the blank.

1 11. The method of claim 10, which further comprises the step of laser welding
2 together the ends of the precious metal wire.

1 12. The method of claim 10, which further comprises the step of burnishing the
2 precious metal in the annular groove.

3 13. The method of claim 10, wherein the precious metal wire is hammered into the
4 annular groove.

1 14. The method of claim 10, wherein the precious metal wire is rolled into the
2 annular groove.

1 15. The method of claim 10, wherein:
2 the precious metal wire is formed into an endless hoop for each annular groove;
3 and
4 an endless hoop is pressed into each annular groove using a radial
5 crimping/swaging machine.

1 16. The method of claim 10, which further comprises the steps of:
2 undercutting the walls of the groove with an abrasive tool prior to forcing a piece
3 of precious metal wire into each annular groove.

1 17. A method for manufacturing finger rings, bracelets, earrings, and other annular
2 body jewelry from sintered, or cemented, composite materials comprising at least one
3 metal carbide and a metallic binder, comprises the steps of:
4 providing an annular blank having an annular groove therein on an outer surface
5 thereof;
6 forming an endless hoop of precious metal;
7 pressing the endless hoop into the groove using a radial crimping/swaging
8 machine; and
9 removing excess precious metal to the level of the outer surface of the blank.

1 18. The method of claim 17, which further comprises the steps of undercutting the

walls of the groove with an abrasive tool while the blank is chucked in the spinning fixture, and before the precious metal hoop is forced into the groove.

19. The method of claim 17, wherein the annular blank is subjected to a thin film deposition process selected from the group consisting of physical vapor deposition, chemical vapor deposition and plasma-assisted chemical vapor deposition, in which a coating selected from the group consisting of titanium nitride and diamond like carbon is applied thereto.

20. The method of claim 17, which further comprises the steps of:
securing the annular blank in a spinning fixture;
abrading the annular blank against at least one curved abrasive surface so that the annular blank acquires a curved surface about its circumference.